

SOURCE INVENTORY

CATEGORY # 343

OFF-ROAD FOUR WHEEL DRIVE VEHICLES

1999 EMISSIONS

Introduction

Combustion emissions from recreational off-road use of four wheel drive vehicles are included in this category.

Methodology

The number of registered off-highway vehicles by county are available from Department of Motor Vehicles. In addition to these, some on-road vehicles are used off-road, and some off-road vehicles are not registered.

A study conducted by Tyler Research Associates in 1977 for Caltrans, found that for every 1 registered off-highway four wheel drive, there were approximately an additional 6 in use. The study also estimated the average fuel consumption as 105 gallons per year for this type of vehicle.

The Motor Vehicle Emissions Section of the ARB supplied the average emission factors for four wheel drives.

Most of the annual activity takes place in spring, summer and fall. Weekend activity is about twice as high as weekdays and daily activity takes place during daylight hours.

TRENDS

The number of registered off-road four wheel drive vehicles from 1977 to 1999 were used as a basis for estimating 1970-1976 and projecting 2000-2010 four wheel drive vehicle population.

Control

Projected emissions include expected benefits from ARB's Re-Formulated Gasoline Phase II (beginning 1996) and Off-Road Recreational Vehicles Regulations beginning 1997. Control factors developed by ARB were used for projecting emissions.